WHAT IS CLAIMED IS:

5

10

15

20

25

30

1. A multi-channel head position controlling apparatus comprising:

a multi-channel head including a plurality of unit recording heads arranged integrally with a predetermined spacing so as to have head gaps of said unit recording heads aligned with one another, said multi-channel head forming a plurality of multi-linear recording tracks on a tape-like recording medium;

a supporting section for supporting said multi-channel head so as to contact with said tape-like recording medium upon forming an azimuth angle relative to the running direction of said tape-like recording medium in which an alignment direction of said unit recording heads crosses said tape-like recording medium at a slant angle, and making said azimuth angle variable;

a detecting section for detecting a deviation between a reproducing level of a control record which is previously recorded on said multi-linear recording tracks and a reference level; and

a displacement control section for controlling displacement of said supporting section and varying said azimuth angle so as to minimize said deviation, according to said deviation.

2. The multi-channel head position controlling apparatus according to Claim 1, wherein said detecting section detects deviation between a reproducing level of said multi-linear recording tracks at both ends of said tape-like recording medium and a reference level.

3. The multi-channel head position controlling apparatus according to Claim 2, wherein said displacement control section controls said supporting section so as to make said supporting section tilt centered on unit recording heads located around a central portion amongst said unit recording heads forming said multi-channel head.

5

15

20

25

4. A method for controlling a position of a multi-channel head comprising steps of:

constructing a multi-channel head including a plurality of unit recording heads arranged integrally with a predetermined spacing so as to have head gaps of said unit recording heads aligned with one another, said multi-channel head forming a plurality of multi-linear recording tracks on a tape-like recording medium;

arranging said multi-channel head so as to contact with said tape-like recording medium upon forming an azimuth angle relative to the running direction of said tape-like recording medium in which an alignment direction of said unit recording heads crosses said tape-like recording medium at a slant angle, and making said azimuth angle variable;

detecting a deviation between a reproducing level of a control record which is previously recorded on said multi-linear recording tracks and a reference level; and

controlling displacement of said supporting section and varying said azimuth angle so as to minimize said deviation, according to said deviation.